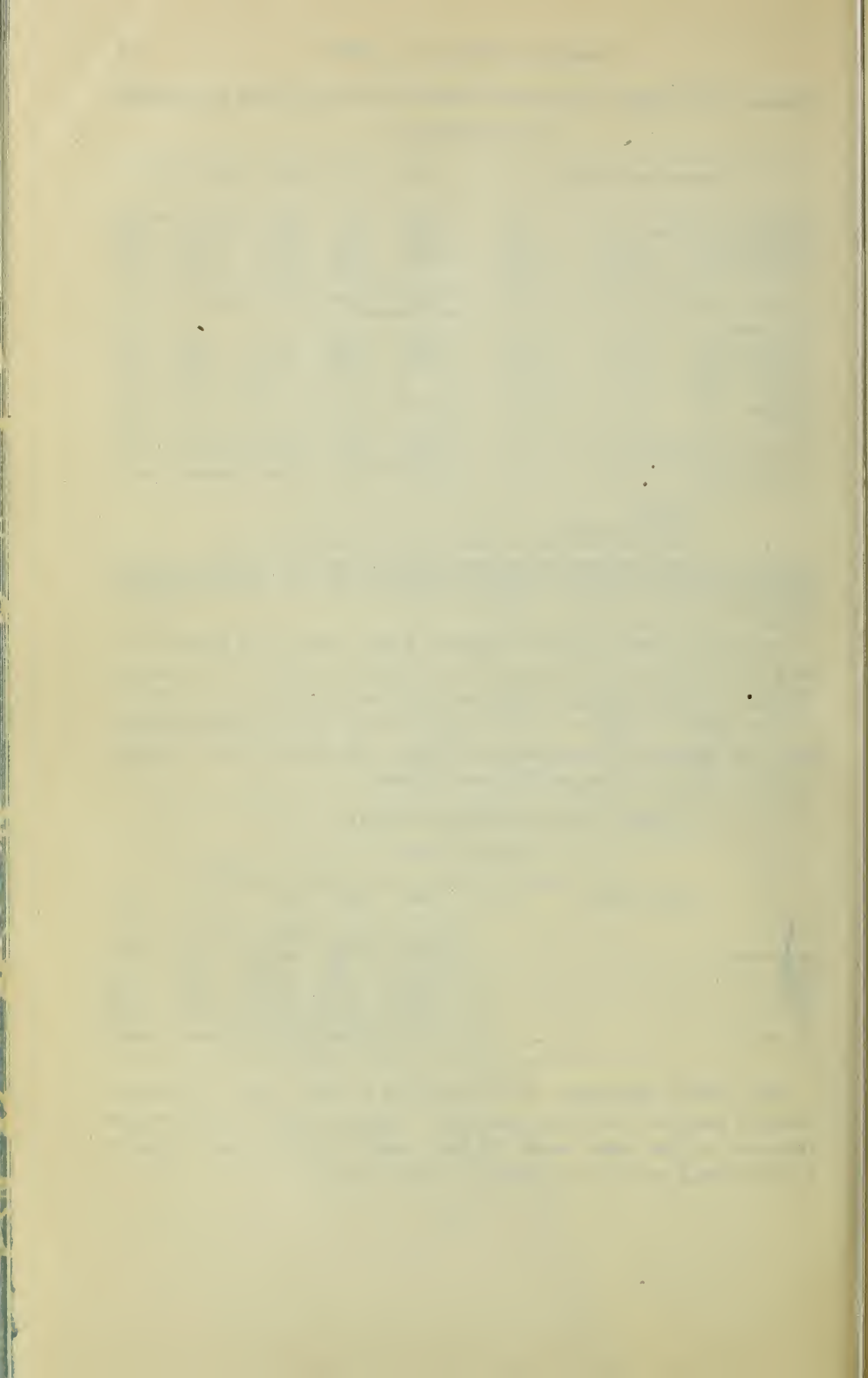


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



Issued October 5, 1912.

---

U. S. DEPARTMENT OF AGRICULTURE,  
BUREAU OF STATISTICS—CIRCULAR 40.

VICTOR H. OLMSTED, CHIEF OF BUREAU.

---

FOREIGN CROPS,  
AUGUST-SEPTEMBER, 1912.

---

PREPARED BY

CHARLES M. DAUGHERTY,  
*Chief of the Division of Research and Reference.*

---

WASHINGTON : GOVERNMENT PRINTING OFFICE : 1912

---

ADDITIONAL COPIES of this publication  
may be procured from the SUPERINTEND-  
ENT OF DOCUMENTS, Government Printing  
Office, Washington, D. C., at 5 cents per copy

---



## FOREIGN CROPS, AUGUST-SEPTEMBER, 1912.

---

### CANADA.

Crop news, excepting in the case of autumn-sown wheat, which was extensively winterkilled, has this year been of the featureless character, which usually distinguishes seasons of normal or average yields. Winter wheat harvest, according to the preliminary estimate of the Census and Statistics Office, has given a return of only 16,773,300 bushels, compared with 26,014,000 in 1911. The deficiency of over 9 million bushels is ascribed almost entirely to the rigors of winter; about 317,000 acres were frozen out and only 781,000 acres were left for harvest, against 1,172,119 acres harvested last year. The quality of a considerable proportion of the 1912 crop in Ontario, moreover, has been impaired by wet harvest weather.

Official indications point also to a slight decrease, compared with 1911, in the yield of spring wheat. The Census and Statistics Office on September 14 estimated the total production (preliminary) of spring wheat in the Dominion in 1912 at 189,256,000 bushels. This quantity added to the estimate of 16,773,300 bushels of autumn-sown gives the wheat total as 206,029,300 bushels, against 215,851,000 bushels (final) in 1911. The rye estimate is 3,136,000 bushels this year, compared with 2,694,400 bushels last. Barley is predicted to yield 46,497,000 bushels; oats, 376,943,000 bushels of 34 pounds each, against 348,187,600 bushels a year ago. Flaxseed upon a greatly increased area of 1,677,800 acres (allowing for deduction of nonproductive areas) is expected to yield 23,145,000 bushels, or at the rate of 13.74 bushels per acre, figures which compare with a total of 7,867,000 bushels from a productive area of only 682,622 acres last year, when a large proportion of the area sown in the northwest was not harvested because of the late and stormy season. The above estimates are based on the areas to be harvested, the calculation being that of the areas sown in the Dominion, 3 per cent of the spring wheat, 2.3 per cent of the oats, 2.1 per cent of the barley, and 3.8 per cent of the flaxseed will from various causes, such as hail, flood, pests, etc., be entirely unproductive.

The 1912 yield of hay and clover, as estimated provisionally by the Census and Statistics Office, is 11,038,000 tons against 12,694,000

tons, the preliminary estimate for 1911. Alfalfa shows an estimated total production of 177,300 tons compared with 227,900 tons, preliminary, last year.

The prospect September 1 was for good average yields per acre of oats, barley, rye, and flaxseed, the condition of each of these crops in the entire Dominion being rated between 84 and 89 per cent. Buckwheat in Ontario and Quebec, where the bulk of the crop is raised, was rated 4 or 5 per cent higher than the month before. Corn for husking, the culture of which is confined mostly to these two Provinces, showed a condition of 69.66. The promise of potatoes, mangolds, and turnips was generally excellent, excepting in Quebec. In short, the general crop situation was officially summarized as auguring well, "giving neither the exceptionally favorable promise of this time last year nor the equally exceptionally unfavorable promise of the year before."

The Dominion Department of Agriculture, reporting upon fruit conditions under date of August 15, states in substance as follows: No marked change has taken place in the apple prospect. Growth is generally excellent, larger, indeed, than usual, and no exceptional complaints of insects are made. The general average for the Dominion stands at 69 per cent for early apples, 65 per cent for fall apples, and 61 per cent for winter apples, an average for all varieties of 65 per cent. Apple scab is reported from practically all sections, and there will doubtless be a much larger proportion of No. 3 fruit than usual. The condition of the above-named varieties July 15, it may be added, was early 67, fall 69, winter 65, and the average for all kinds 67.

In British Columbia pears promise a good crop, but in eastern Canada the yield, as a whole, will be rather light. The plum crop in Vancouver Island and the lower mainland of British Columbia will not be large nor the quality the best, but in the rest of that Province the yield of almost all varieties will be excellent. In eastern Canada the plum crop is below average, except in Nova Scotia, where there is practically a full yield. Grapevines had made excellent growth; the fruit will be of good size, and possibly earlier than last year.

#### GREAT BRITAIN.

Agriculture during the greater part of the season has been pursued under unusually disheartening conditions. Tempestuous rains, occurring with discouraging frequency almost everywhere from mid-June to late August, have seriously impeded farm work and prevented proper cultivation of the fields; though stimulative of luxuriant vegetation, especially in the case of root crops and grasses, the storms have repeatedly lodged the standing grain, and the harvest now in progress has been one of the most unsatisfactory in point of quantity, quality,



expense, and difficulty of reaping that has been known in many years.

Favored by a spell of sunny, sultry weather in the last half of July, cutting began early in the south of England, but before the end of the month its northward progress had been interrupted by frequent torrential rains, which, persisting, culminated late in August in storms of almost unprecedented violence. The blasted hopes of an early harvest were thereby supplanted by the reality of a late one. According to authoritative descriptions of the destructive effects of the late tempests, the country afterwards presented in many parts scenes resembling devastation. Submerged meadows, thousands of acres of spoiled hay lying upon saturated fields, vast expanses of standing grain beaten down by gales, many fields of shocked wheat soaked with rain, root crops rank with weeds, and other like calamities bore witness to the disastrous character of the season. Even in the event of perfect weather during the remainder of the harvest, much of the damage is known to be irreparable.

The British Board of Agriculture and Fisheries reporting on crop conditions in England and Wales on August 1—i. e., before the trying meteorological disturbances of that month had transpired—rated the state of all crops under average, excepting barley, potatoes, mangold, meadow hay, and hops. In a crop-reporting system where 100 symbolizes an average condition, the agricultural situation a month later, September 1, was as follows, with comparisons:

*Condition of crops in England and Wales.*

Crop.	1912			1911		1910		1909		1908	
	Sept. 1.	Aug. 1.	July 1.	Aug. 1.	July 1.	Aug. 1.	July 1.	Aug. 1.	July 1.	Aug. 1.	July 1.
Wheat .....	94	98	99	103.	101	101	101	105	104	100	100
Barley .....	96	102	99	96	97	102	101	105	103	98	97
Oats .....	87	91	90	92	94	99	100	97	96	96	96
Beans .....	94	97	98	92	99	102	101	.....	.....	.....	.....
Peas .....	92	99	102	95	99	100	101	.....	.....	.....	.....
Potatoes .....	89	100	102	100	102	106	104	105	104	100	103
Mangold .....	100	104	101	97	99	102	102	.....	.....	.....	.....
"Seeds" hay .....	.....	92	91	93	94	105	106	94	92	102	103
Meadow hay .....	.....	102	99	89	90	105	105	.....	.....	.....	.....
Hops .....	99	100	100	98	98	102	107	.....	.....	.....	.....

These figures, supplemented by authoritative statements concerning cool, stormy weather in early September, suggest a wheat crop this season inferior both in quantity and in quality to that of any recent year. Barley, notwithstanding its former fine promise, has, it is known, been partially ruined by the inclement weather of the month. The oat crop, moreover, has deteriorated more than other cereals, and will give a yield, as it did in 1911, much below average. The condition of beans is worse than in any year since 1904, and peas, owing to low temperatures and dripping skies, are reported to have rotted extensively in the ground. Blight has spread among potatoes

and their condition has greatly declined. The appearance of man-gold and other roots, though they too have suffered from excessive moisture, is described as the redeeming feature of the season, while hay, much of which was deluged by rains and rendered worthless while lying on the ground, has of all crops suffered the greatest calamity. Hops are said to have been little affected by prolonged wet weather and sunless days, and the outlook is for almost a full average crop. To what extent the gloomy agricultural prospect may yet be modified for the better will depend upon excellent weather conditions until all crops are under shelter.

#### FRANCE.

The past summer, though not so disastrous in general agricultural results as in Great Britain, was one of unusual inclemency. Throughout the season intermittent rainstorms recurred with persistent frequency, and, while tending to promote a luxuriant growth of grasses and hoed crops, enforced much imperfect cultivation and gave rise in parts to an undesirable growth of weeds. During the progress of the cereal harvest both reaping and thrashing were interrupted and delayed in Department after Department by repeated downpours, which lodged many fields of standing grain and often caused that which had been cut to lie drying in the fields many days before housing. Though the yield as a whole may not have been seriously diminished by these untoward conditions, the quality was undoubtedly adversely affected. The irregular results of the harvest, good yields and bad often occurring in juxtaposition, had caused much diversity of opinion respecting the total outcome, but the publication of the official estimates in September fixed the 1912 yield of wheat at 334,871,000 bushels of an average natural weight of 60 pounds per bushel, against a final estimate of 315,444,000 in 1911, average natural weight per bushel 61.3 pounds. As the consumptive requirements are over 340 million bushels and the carry-over from last year exceptionally small, it would seem that rather important imports may again be necessary the coming season. As to barley, rye, and oats the indications are that the first-named may give an outturn satisfactory in quantity, but that extensive discoloration may make the supply of good brewing sorts scant. Rye, the area of which is about 37,000 acres larger than last year, yields 50,934,000 bushels, compared with 45,894,000 bushels in 1911. Oats, although the prospect deteriorated because of excessive moisture in August, suffered more seriously from rain in early September. Potatoes, sugar beets, and the root crops have made vigorous growth and with favorable conditions to the end of the season should yield abundantly. For the forage crops also the outlook is very encouraging. The prospect for fruit, according to the Central Committee for the Exploitation of



Fruits, is average. Cider apples and pears promise quite a good crop, but not sufficient for domestic needs, and heavy imports are anticipated. Plum trees in some localities are overladen, in others bearing no fruit. Nuts are pronounced almost a failure. Vineyards as a whole promise a mediocre vintage.

#### ITALY.

The olive crop, considering the fact that the trees in Sicily and the southern part of the peninsula suffered from drought in the winter and spring, and that temperatures at times have been unfavorable in other important producing sections, promises in general to be a moderate one. Especially in the greater part of Umbria, Latium, and Campania are good yields expected. But in the Lucca district of Tuscany, according to a recent consular report, a yield is expected less than half the annual normal production. In Puglia olive fly is complained of, and in Sardinia a short yield is predicted. Of the late crops, corn and potatoes are said to be making fine development. The 1912 bean crop is over 4 million bushels short of that of last year; the official estimate is 14,778,169 bushels against 18,990,424 bushels in 1911.

#### SPAIN.

The last official report on the agricultural outlook presents a rather gloomy prospect for the olive crop in some Provinces. In Alicante the yield threatens to be scanty. In Almeria the fruit has fallen in considerable quantities because of drought. In Cordoba the olive trees of the Sierra, the only ones in this Province which did promise a normal crop, have suffered heavy losses of fruit. Sudden changes of temperature in May and June caused the dropping of the greater part of the olives in the Province of Jaen; and disease, except in the better-worked tracts, has wrought havoc among the olive groves of Malaga. In Teruel and Lerida, on the other hand, prospects are described as good. No mention is made of conditions in other Provinces.

The Malaga raisin crop, according to consular authority, is about 20 per cent less than that of last year, or 900,000 to 950,000 boxes of 22 pounds each, compared with 1,200,000 boxes in 1911. The Almerian grape crop, it is said, will be of about average proportions. Exports of this product in 1911 are reported to have amounted to 2,383,206 barrels and 17,963 half barrels. A trade estimate puts the probable export this year at 2,250,000 barrels.

#### THE SUGAR INDUSTRY.

In Spain, the only cane-growing country of Europe, sugar is extracted from both cane and beets. Of the 112,453 acres of the two crops in 1911, approximately 11,666 were under sugar cane and

90,787 under sugar beets. The culture of cane, originally the only resource for sugar making in the Kingdom, is localized wholly in three southeastern Provinces—Granada, where over half the crop is raised, Malaga, and Almeria. In these Provinces are 24 fabricas, or sugar factories, 11 of which are associated in an organization entitled "La Sociedad General Azucarera," and 13 small sugar mills (trapiches), some of which produce only molasses. The remaining factories and all the sugar mills are independent. A new factory, but included in the above enumeration, has recently been erected in Granada by a cooperative society of cultivators. Twelve of the factories and 3 of the sugar mills are located in Granada, 10 factories and 10 mills in Malaga, and 2 factories in Almeria. In 1911 only 10 of the factories in Granada were in operation, 8 in Malaga, and 2 in Almeria; and of the sugar mills 7 only were active in Malaga and 3 in Granada. The quantity of cane ground in that year was 258,138 tons, and the sugar produced amounted to 44,741,610 pounds. Grinding begins in some of the small mills in December and continues until late June; in commercial statements, however, the cane-sugar year is assumed to begin January 1.

Sugar-beet cultivation, which first came into prominence in Spain in the last decade of the nineteenth century, is much more widely distributed, being reported as more or less extensive in over one-third of the 49 Provinces of the Kingdom. In fact, the rapid extension of its culture has in late years relieved the country of the necessity of importing the 100 million to 150 million pounds which a few years ago were annually drawn from the colonies.

The principal sugar-beet growing Provinces, in the order of their importance as producers, are Granada, Saragossa, Navarra, Madrid, Valladolid, Oviedo, and Malaga. Excepting the plantations in Granada and Malaga, it is noteworthy that practically the entire sugar-beet crop is raised in provinces north of the latitude of the city of Madrid. Fifty-three beet-sugar factories, of which 37 are members of the Sociedad General Azucarera, are in existence in the Kingdom; 15 are located in Granada, 9 in Saragossa, 5 in Oviedo, 4 in Malaga, 3 in Madrid, 2 in Navarra, other sugar-producing Provinces having 1 factory each. In 1911, 32 of the factories worked and 21 were inactive. Figures for the entire campaign are not yet available, but the quantity of sugar beets sliced from July 1 to December 31, 1911, was 745,256 tons and the quantity of sugar produced was 150,000,000 pounds. Slicing usually begins in the southeastern Provinces early in August, and moving northward the campaign is almost completed by December 31. Statistics relative to the industry taken from "Memoria sobre el Estado de la Renta de Aduanas en 1911," published in Madrid, are given on the following page.

*Production of sugar cane, sugar beets, cane sugar, and beet sugar in Spain, campaigns 1904-1911.*

Year. <sup>1</sup>	Sugar cane.	Sugar ex- traction.	Sugar beets.	Sugar ex- traction.	Cane sugar.	Beet sugar.	Total sugar.
	<i>Tons</i> (2,000 lbs.).	<i>Per cent.</i>	<i>Tons</i> (2,000 lbs.).	<i>Per cent.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1904.....	287,735	8.49	704,718	11.08	48,887,250	156,149,164	205,036,413
1905.....	340,778	9.32	747,413	11.20	63,536,010	167,542,168	231,078,178
1906.....	204,936	8.45	774,972	11.41	34,661,740	176,946,723	211,608,463
1907.....	226,404	7.83	1,078,531	11.64	35,477,880	251,141,500	288,603,520
1908.....	140,500	11.03	971,809	11.17	30,990,770	217,056,794	248,047,564
1909.....	276,680	8.62	734,888	12.92	47,773,554	189,919,295	237,692,849
1910.....	207,969	10.76	532,882	12.90	44,754,798	137,485,745	182,240,543
1911.....	258,138	8.66	2 745,256	10.06	44,741,610	2 150,000,367	194,741,976

<sup>1</sup> Year beginning Jan. 1 for cane sugar, July 1 for beet sugar.<sup>2</sup> From July 1 to Dec. 31, 1911, only.

## NETHERLANDS.

Because of a superabundance of moisture in August, the former fine prospect for the agricultural season of 1912 has been greatly impaired. Barley was housed under favorable conditions, but rye and oats were widely injured in quality by prolonged rains after cutting. Compared with last year, there is an expansion of the surface under both rye and wheat, the former being the principal bread grain cultivated. Increased areas were also laid down to peas, beans, mustard, poppies, potatoes, sugar beets, chicory, onions, and garden seeds. On the other hand, oats, which is the least promising of all cereals, barley, and buckwheat cover a less extent than last year, and a very notable diminution is apparent in the cultivation of caraway seed and canary seed. The Dutch Department of Agriculture, Commerce, and Industry provisionally estimates the acreage under various crops in 1912, compared with revised figures for the two preceding years, as below. The latest available estimate of the same authority respecting yields is for the year 1911.

*Area, 1912-1910, and production, 1911-1909, of specified crops in the Netherlands.*

[Estimates of the Dutch Department of Agriculture, Commerce, and Industry.]

Crop.	Area.			Production.		
	1912	1911	1910	1911.	1910	1909
Wheat:	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>
Winter .....	133,498	132,134	119,302	(2)	(2)	(2)
Spring .....	9,034	10,045	15,980	(2)	(2)	(2)
Total wheat .....	142,532	142,179	135,282	5,511,055	4,440,600	4,158,016
Rye:						
Winter .....	552,222	551,752	543,511	(2)	(2)	(2)
Spring .....	6,215	5,122	5,095	(2)	(2)	(2)
Total rye .....	558,437	556,874	548,606	16,110,137	15,356,739	17,652,492
Barley:						
Winter .....	53,445	55,118	50,594	2,848,736	2,359,474	2,528,149
Spring .....	13,119	14,112	18,822	566,825	744,505	804,006
Total barley .....	66,564	69,230	69,416	3,415,561	3,103,979	3,332,155

<sup>1</sup> Winchester bushels<sup>2</sup> No official data.



*Area, 1912-1910, and production, 1911-1909, of specified crops in the Netherlands—Continued.*

Crop.	Area.			Production.		
	1912	1911	1910	1911	1910	1909
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.</i>	<i>Bushels.</i>
Oats .....	338,505	341,458	348,426	17,723,817	18,039,009	19,360,745
Buckwheat .....	29,069	32,007	35,138	366,892	832,530	819,162
Peas .....	63,712	55,257	64,594	1,838,339	1,260,296	1,452,196
Beans .....	16,966	16,823	15,580	1,242,422	1,328,356	1,651,255
Mustard seed:						
Brown .....	1,930	2,113	2,103	48,851	48,718	38,797
Yellow .....	2,380	1,848	3,081	48,848	73,877	113,814
Caraway seed .....	8,070	20,336	19,009	(2)	(2)	(2)
Poppy seed .....	1,549	593	645	(2)	(2)	(2)
Flax .....	36,724	38,822	29,029	373,725	316,216	219,045
Canary seed .....	806	1,164	823	35,315	24,555	18,488
Onions .....	6,961	6,210	5,938	2,061,075	1,433,723	2,057,500
Potatoes:						
For food .....	342,594	336,637	328,191	(2)	(2)	(2)
For industrial uses .....	73,665	74,501	72,642	(2)	(2)	(2)
Total potatoes .....	416,259	411,138	400,833	103,468,098	88,376,242	97,274,534
				<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
				<i>(2,000 lbs.).</i>	<i>(2,000 lbs.).</i>	<i>(2,000 lbs.).</i>
Sugar beets .....	155,312	137,388	138,554	2,210,071	1,793,022	1,650,065
Chicory .....	2,879	2,350	1,727	25,584	18,342	15,762
Sugar-beet seed .....	472	262	198	(2)	(2)	(2)
Onion seed .....	329	247	198	(2)	(2)	(2)
Spinach seed .....	3,519	1,972	(2)	(2)	(2)	(2)
Radish seed .....	862	536	(2)	(2)	(2)	(2)

<sup>1</sup> Winchester bushels.

<sup>2</sup> No official data.

The outlook for the various kinds of fruit is variable. Pears promise abundance, but apples will not give the returns at one time expected. Plums and peaches are said to have caused great disappointment excepting in one district.

#### DENMARK.

Latest reports indicate an all-around deterioration in cereal conditions. Oats, which occupies a larger area than any other cereal, and barley each has suffered in quality from excess of rainfall, and the outturn of rye and wheat will not be of record proportions. Sugar beets, potatoes, and turnips under the influence of sufficient moisture have made luxuriant and healthy growth.

#### GERMANY.

Rye harvest, which commonly is mostly finished before that of other cereals begins, was this year about a fortnight late—the result of drought-delayed growth in the spring—and the incidence of harvests of all cereals almost simultaneously caused unusual stress in the labor supply. Moreover, intermittent downpours interfered pretty generally with the prosecution of harvest work, and wide areas of grain were so badly lodged that the use of mowing machines was necessitated in many places. Although the harvest was difficult and

costly, in respect of quantity it has been very satisfactory. Rye has probably given the largest outturn in the country's history and wheat the greatest volume of any year excepting one. Both barley and oats promise greater yields than in either of the past two years. The unfavorable harvest weather, however, indicates that the quality of all cereals will be inferior to that of last season. Potatoes, on the whole, have made good growth, but there are complaints of thin stands, rot, weediness, and leaf disease in some districts. The Imperial Statistical Bureau's report on crop conditions September 1 follows:

*Condition of crops in Germany.*

[1=very good; 2=good; 3=medium; 4=poor; 5=very poor.]

Crop.	1912					1911				
	Sept. 1.	Aug. 1.	July 1.	June 1.	May 1.	Sept. 1.	Aug. 1.	July 1.	June 1.	May 1.
Winter wheat.....	.....	2.4	2.3	2.3	2.5	.....	2.6	2.6	2.5	2.6
Spring wheat.....	.....	2.4	2.2	2.3	.....	.....	3.0	3.0	2.6	2.6
Winter spelt.....	.....	2.0	2.0	2.0	2.0	.....	2.3	2.4	2.5	2.7
Winter rye.....	.....	2.4	2.4	2.6	2.6	.....	2.6	2.7	2.7	2.8
Spring rye.....	.....	2.4	2.3	2.4	.....	.....	2.7	2.7	2.5	2.7
Spring barley.....	.....	2.2	2.1	2.2	.....	.....	2.5	2.5	2.4	2.4
Oats.....	2.8	2.7	2.5	2.4	.....	3.0	2.9	2.9	2.6	2.6
Potatoes.....	2.6	2.8	2.6	2.7	.....	3.5	3.0	2.5	2.6	.....
Clover.....	2.6	3.2	3.2	3.4	3.5	4.3	3.9	3.1	2.9	2.9
Alfalfa.....	2.4	2.6	2.5	2.8	2.9	4.1	3.7	2.8	2.8	2.8

The prospect for all kinds of fruit is very moderate. Last year's drought and a sudden cold spell in February after a long period of warm weather seriously injured the trees, and though there was a profusion of blossoms the buds showed the effects of the adverse weather. Those which had escaped the rigorous winter were seriously affected by heavy frosts in the spring. In a number of regions fruit is a practical failure. For the country as a whole apples promise a medium yield, stone fruits and berries medium to poor, and nuts poor.

Quantitative estimates of 1912 cereal yields in the entire Empire have not yet been published; but a recent official estimate of the results in Prussia, where ordinarily about three-fifths of the German wheat and a slightly larger proportion of the German rye crop is produced, affords authoritative data respecting the crops in that branch of the Empire. The estimates appear on the following page.



*Yield of specified crops in Prussia, 1912-1907.*

Crop.	1912 <sup>1</sup>	1911	1910	1909	1908	1907
	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>
Winter wheat.....	80,643,790	85,460,768	80,178,069	68,939,826	75,847,095	53,618,040
Spring wheat.....	9,826,600	10,279,315	11,054,599	14,276,181	10,466,118	22,270,612
Total wheat.....	90,470,390	95,740,083	91,232,668	83,216,007	86,313,213	75,888,652
Winter rye.....	343,893,074	329,361,453	313,945,787	333,485,393	319,277,849	281,834,529
Spring rye.....	2,544,305	2,400,770	2,620,915	2,779,253	2,581,429	2,780,945
Total rye.....	346,437,379	331,762,223	316,566,702	336,264,646	321,859,278	284,615,474
Barley.....	81,123,125	78,835,440	77,562,559	88,913,860	79,937,326	92,110,806
Oats.....	387,431,857	358,970,402	364,559,476	416,841,910	352,949,364	426,422,344

<sup>1</sup> Preliminary.<sup>2</sup> Bushels: Wheat 60, rye 56, barley 48, and oats 32 pounds.

## AUSTRIA.

A wet harvest has somewhat marred the previously brilliant prospect for a more bountiful outturn of wheat, rye, and oats than had been realized in either of the past two years. Reaping was hindered and rendered laborious by extensive lodging. Yields, though definite official estimates are not yet available, are in general regarded as not satisfactory and the quality is unquestionably below that of last year. Barley, the preharvest condition of which was the poorest of all cereals, was also extensively laid, causing in many places premature ripening and discoloration of grain. The late crops, corn, potatoes, and sugar beets, profited from the copious rainfall, and the present outlook for each is more promising than in any recent year. For fruit, the summer crop of which was very abundant, the season has been especially favorable. The olive trees are reported to have the fullest possible setting of fruit, and damsons, considering the climate, promise abundance. Apricots, however, are far below the average of preceding years. Vineyards, because of peronospora and leaf disease, have required careful attention which, during cereal harvest, was in many cases impossible. Hops promise a fair average yield. The progress of the field crops from May 1 to September 1, 1912, compared with preceding years, is shown in the following statement of the Austrian Department of Agriculture:

*Crop conditions in Austria.*

[1=very good; 2=good; 3=medium; 4=poor; 5=very poor.]

Crop.	1912					1911					1910				
	Sept. 1.	Aug. 1.	July 1.	June 1.	May 1.	Sept. 15.	Aug. 15.	July 15.	June 15.	May 15.	Sept. 15.	Aug. 15.	July 15.	June 15.	May 15.
Wheat.....	2.3	2.3	2.1	2.1	2.4	2.8	2.8	2.7	2.5	2.5	2.8	2.8	2.5	1.9	1.9
Rye.....	2.3	2.2	2.1	2.3	2.5	2.8	2.8	2.7	2.7	3.1	2.4	2.4	2.3	2.2	2.5
Barley.....	2.5	2.5	2.3	2.3	2.5	2.4	2.4	2.4	2.4	2.3	3.0	2.9	2.7	2.6	2.2
Oats.....	2.4	2.2	2.3	2.4	2.6	2.7	2.7	2.6	2.5	2.4	3.2	2.7	2.9	2.8	2.3
Corn.....	2.0	1.9	2.1	2.3	.....	3.3	3.1	2.5	2.6	2.1	2.3	2.2	2.1	2.2	2.2
Potatoes.....	2.7	2.3	2.3	2.5	.....	3.4	3.0	2.4	2.3	2.2	2.9	2.5	2.3	2.3	2.4
Sugar beets.....	1.9	1.7	2.1	2.8	.....	4.2	4.0	3.3	2.9	2.8	2.5	2.0	2.1	2.3	2.7
Clover.....	2.4	2.7	2.9	3.1	3.4	4.0	3.9	3.3	2.8	2.8	2.3	1.9	2.2	1.9	2.0

The Austrian Department of Agriculture has recently published its final estimates of the area and production of field and fruit crops in 1911. The figures are of particular interest as illustrative of the general character and of the diversity of Austrian agriculture, the genial climate of the Province of Dalmatia on the Adriatic coast permitting the cultivation of olives and almonds, while in all other Provinces the products are those common to the temperate zone.

*Final estimates of the crops of Austria, 1911-1909.*

[From Annual Reports of the Austrian Department of Agriculture.]

Crop.	Area.			Production.		
	1911	1910	1909	1911	1910	1909
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>			
Wheat.....bushels (60 lbs.)..	3,002,487	2,998,754	2,942,099	58,886,292	57,588,984	58,467,006
Spelt.....bushels (40 lbs.)..	14,982	13,455	8,611	266,332	195,620	138,267
Rye.....bushels (56 lbs.)..	4,994,743	5,092,682	5,134,642	104,114,475	108,938,423	114,432,625
Corn <sup>1</sup> .....do.....	742,763	765,002	826,248	11,973,120	17,387,924	16,101,599
Do. <sup>2</sup> .....do.....	5,488	5,389	4,972			
Millet <sup>1</sup> .....do.....	87,562	89,346	96,139	1,356,892	1,554,101	1,597,422
Do. <sup>2</sup> .....do.....	474	1,050	1,542			
Barley.....bushels (48 lbs.)..	2,709,889	2,721,868	2,795,479	74,413,577	67,617,594	79,368,020
Buckwheat <sup>1</sup> .....do.....	169,268	171,028	190,722	3,064,798	3,299,997	3,248,997
Do. <sup>2</sup> .....do.....	205,790	208,649	203,341	1,794,025	2,673,730	3,091,864
Oats.....bushels (32 lbs.)..	4,640,681	4,529,387	4,574,375	156,393,215	142,138,581	171,938,277
Maslin.....bushels (58 lbs.)..	95,410	121,880	124,146	2,144,947	2,758,791	3,093,137
Potatoes.....bushels (60 lbs.)..	3,107,992	3,069,187	3,047,551	426,406,009	491,126,219	479,615,830
Pulse.....do.....	625,983	625,845	685,554	8,931,926	9,749,101	11,718,228
Rape seed.....tons (2,000 lbs.)..	36,581	39,808	35,867	20,017	23,329	17,635
Mustard seed.....do.....	363	504	754	151	253	381
Poppy seed.....do.....	20,457	21,957	25,091	5,530	7,904	10,137
Anise and fennel seed.....do.....	324	341	309	94	106	109
Sunflower seed.....do.....	304	304	301	71	72	54
Flax (seed).....do.....	94,884	95,909	111,101	19,511	18,575	23,807
Flax (fiber).....do.....	(9)	(9)	(3)	23,323	25,095	34,068
Hemp (seed).....do.....	54,100	57,075	59,003	13,304	13,973	15,897
Hemp (fiber).....do.....				15,732	16,593	19,659
Sugar beets.....do.....	615,519	626,969	524,756	4,684,520	7,784,239	6,086,412
Mangold <sup>1</sup> .....do.....	400,633	389,121	378,589	3,320,780	3,916,300	3,857,403
Do. <sup>2</sup> .....do.....	149,095	159,202	160,039	410,115	649,451	667,582
Chicory.....do.....	15,268	13,934	15,120	72,136	125,504	139,329
Cabbage <sup>1</sup> .....do.....	144,037	149,992	152,661	726,456	910,927	961,210
Do. <sup>2</sup> .....do.....	8,120	7,403	3,632	9,850	14,642	5,695
Pumpkins <sup>1</sup> .....do.....	13,207	13,558	12,884	33,973	39,182	36,863
Do. <sup>2</sup> .....do.....				121,360	171,501	206,257
Clover.....do.....	2,889,884	2,914,898	2,779,954	3,924,897	5,048,003	4,083,501
Grasses (first cutting).....do.....	498,010	448,160	465,349	582,845	666,359	707,041
Grasses (second cutting).....do.....	61,343	76,060	74,219	51,350	77,664	73,545
Clover seed (first cutting), tons (2,000 lbs.).....	21,735	16,743	24,426	18,460	18,019	23,708
Clover seed (second cutting), tons (2,000 lbs.).....	210,272	223,084	247,621			
Meadows.....tons (2,000 lbs.)..	7,576,494	7,577,124	7,578,127	9,708,892	10,576,210	9,295,676
Grapes.....do.....				5,241	4,465	5,348
Figs.....do.....				7,696	9,367	8,086
Chestnuts.....do.....				4,411	5,216	4,566
Core fruits.....do.....				475,963	707,840	521,916
Stone fruits.....do.....				285,248	455,712	867,835
Nuts, n. & s.....do.....				4,594	4,415	4,624
Almonds.....do.....				2,346	2,546	3,434
Tobacco.....pounds.....	10,022	11,105	11,878	11,882,574	13,590,257	19,188,397
Hops.....do.....	49,220	52,585	55,958	18,989,322	36,402,355	18,705,811
Wine.....gallons.....	548,443	551,223	568,483	101,352,889	67,281,378	89,404,929
Olive oil.....do.....				1,956,921	820,787	1,582,609

<sup>1</sup> Grown as principal crop.

<sup>2</sup> Grown as second crop.

<sup>3</sup> See flaxseed area.

## HUNGARY.

Cereal harvest was completed under favorable conditions, barring a few days' rain, early in August. Subsequent partial thrashings indicate preharvest expectations to have been oversanguine as to the bread grains but quite conservative respecting barley and oats. Wheat and rye, according to the latest official forecast, have yielded, respectively, 2,144,165 and 1,895,047 bushels less than was predicted in early July, and the quality of both crops is inferior to that of last year. Quantitatively barley and oats have closely approximated earlier prognostications, but quality is disappointing, a very small proportion of the barley, in particular, being up to good brewing standard. Although each of the cereals, excepting rye, has given diminished results, as compared with the excellent ones of 1911, the outcome, contrasted with all other years, is on the whole very satisfactory. Subjoined are the estimates of the Hungarian Department of Agriculture on (1) the areas originally sown for the 1912 harvest, (2) the areas remaining to be harvested after deducting the abandonment because of winter-kill, hail, inundations, etc., and (3) quantitative forecasts at regular intervals respecting the probable outcome.

*Area sown and harvested and prospective yield of cereals in Hungary (Proper) in 1912, and actual yield in 1911.*

Crop.	Area sown.	Area harvested.	Forecasts, 1912.				1911 (final).
			Sept. 9.	August 5.	July 22.	July 8.	
	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Wheat.....	8,928,077	8,607,558	171,407,650	169,030,213	170,195,752	173,551,815	174,887,567
Rye.....	2,839,664	2,759,037	53,697,757	53,198,321	54,243,250	55,592,804	50,352,891
Barley.....	2,645,816	2,632,591	69,766,404	67,224,487	66,727,280	66,575,673	73,595,275
Oats.....	2,496,918	2,486,964	79,296,706	79,941,421	80,167,978	80,615,415	89,656,094

Although the outlook for fruit in some parts is very poor, in others there is hope of an average crop. Apples and pears, which in the greater part of the country promise an average yield, are suffering seriously from attacks of insects; late storms are also reported to have been prejudicial to the fruit prospect. In several districts plums also promise an average yield.

## BULGARIA.

In the absence of periodical official reports upon the progress of agriculture throughout the season no definite authentic data are available respecting the actual outcome of the recent harvest. The consensus of commercial opinion, however, seems to be that the aggregate yield of cereals will be less than that of last year, the deficiency being attributed mostly to the spring-sown varieties of wheat, barley, and oats, all of which had suffered severely from



drought. Autumn-sown wheat and barley, much more extensively cultivated than the spring-sown, are believed to have given results little, if any, smaller than at the previous harvest, but the quality of barley is described as very ordinary. Rye, which usually covers an area about one-fifth that of wheat, is thought to be quantitatively inferior to the excellent yield of 1911. The welfare of the corn crop, second in importance only to wheat in the agricultural economy of the country, was at one time seriously threatened by drought, but subsequent forcing weather is thought to have repaired the damage, and present prospects are for an average yield.

## SERVIA.

According to a consular authority the wheat harvest has given a very large yield, but the quality is to some extent unsatisfactory. Rye, not extensively cultivated, is of good quantity and fine quality. The outturn of oats and barley is small. Corn was in good shape excepting in southeastern districts.

## ROUMANIA.

Although there has been no recent official pronouncement upon the agricultural situation, trade reports state that thrashings are confirming the previous expectations of an unsatisfactory yield of wheat. The grain is almost universally described as light in weight, and the aggregate output as likely to be 20 or 25 per cent short of that of 1911. Corn, which is cultivated more extensively in this country than wheat, is said to have mostly recovered from its backward midsummer condition, and an average yield is expected.

## RUSSIA.

The 1912 cereal harvest, excepting interruptions and delay from heavy rains in several of the southern Governments, has on the whole progressed under favorable conditions, and the total yield of all kinds of grain is expected to be much larger than that of last year. Only in the southern part of Saratof and in neighboring parts of the Don territory, where the plants had been seriously injured by drought, does the outturn of winter rye and winter wheat promise to be unsatisfactory. The prospective yields of spring wheat and spring rye are rated from "excellent" to "unsatisfactory" variously in all the important grain-producing regions of the Empire. The condition of barley shortly before cutting began was officially returned as either "good" or "satisfactory" in all Governments excepting the Crimea, Esthonia, Vyatka, and Simbirsk. Oats were everywhere rated "partly excellent," "good," or "satisfactory." A semiofficial report states that the cotton crop, in case good weather prevails until picking, should this season equal that of last year in spite of a decrease in area.

## THE RUSSIAN FLAXSEED CROP.

The flax crop, which in late years has covered an area of over 3½ million acres and yielded annually from 20 million to 23 million bushels of flaxseed, was reported at one time this season to promise a better than average outturn, but adverse weather in important producing sections in midsummer is said to have considerably impaired the prospect.

Flax, as is well known, is cultivated to a greater or less extent in practically all Governments of the Empire, excepting in the extreme north. Production, however, is of little more than local interest, except in a belt of European Russia lying mostly between 55° and 60° north latitude and extending from the southern part of the Baltic Sea eastward to the Siberian boundary. Within this stretch of territory and a few adjacent Governments is comprised about four-fifths of the total flax acreage of the Empire. The primary object of the cultivation in this region is the fiber, a product grown there on such an extensive scale as not only to supply the great flax-spinning industry of Russia, but also to furnish a surplus for export larger than the surplus of all other countries combined.

Owing partly to the methods of culture peculiar to the obtention of fiber from the flax plant, the output per acre of flaxseed is low, averaging only about 5 bushels, but, even with this low yield, the vast extent of land devoted to the culture makes this one of the foremost flaxseed producing regions of the world. For quality, moreover, seed from some sections of the flax belt has an exceptional reputation, the best qualities of "Baltic seed" exported from St. Petersburg, Reval, Riga, and Libau usually commanding a higher price upon European markets than seed from any other source.

In Governments of European Russia south of the flax belt, on the other hand, flax culture, formerly more extensive than at present, has for its fundamental purpose the seed; an export trade, which has now vanished, was some years ago carried on on a somewhat important scale through the Black Sea ports

*Area (sown) and production of flaxseed in the Russian flax belt, by Governments, and in other parts of the Empire, 1906-1910, and yield per acre in 1910.*

[Estimates of the Central Statistical Committee.]

## AREA.

Divisions, Governments, Provinces, etc.	1906	1907	1908	1909	1910
European Russia proper:	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Kovno.....	122,466	126,800	119,281	111,576	113,282
Courland.....	42,320	51,405	32,218	33,036	28,922
Livonia.....	201,835	216,403	195,369	187,275	199,079
Estonia.....	12,724	14,373	10,896	13,161	9,619
Vitebsk.....	136,527	146,281	131,524	124,337	124,748
Pskof.....	288,768	284,883	266,595	255,311	223,163
St. Petersburg.....	31,711	30,439	32,988	29,861	30,752
Novgorod.....	59,420	64,504	68,281	72,047	64,148
Olonez.....	6,520	5,243	6,290	5,945	5,418



*Area (sown) and production of flaxseed in the Russian flax belt, by Governments, and in other parts of the Empire, 1906-1910, and yield per acre in 1910—Continued.*

## AREA—Continued.

Divisions, Governments, Provinces, etc.	1906	1907	1908	1909	1910
European Russia proper—Continued.	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Tver.....	258,297	291,514	255,662	239,023	220,673
Vladimir.....	107,424	107,764	100,526	99,443	104,775
Yaroslaf.....	119,327	114,770	112,702	99,808	100,801
Kostroma.....	123,857	116,875	118,495	111,541	118,128
Vologda.....	76,666	75,508	78,629	77,079	76,294
Nizhni Novgorod.....	87,297	77,055	82,373	81,180	70,651
Vyatka.....	297,261	276,187	289,366	310,789	313,522
Orenburg.....	81,404	78,556	80,208	100,110	101,938
Perm.....	144,042	136,958	129,861	125,523	126,889
Vilna.....	56,073	53,900	48,276	47,901	49,002
Minsk.....	64,598	59,806	63,489	59,242	60,252
Moghilef.....	68,327	77,951	70,783	76,723	76,023
Smolensk.....	261,096	288,433	273,218	260,543	262,116
Uralsk.....	706,625	674,630	683,348	598,786	567,286
Other Governments.....					
Total European Russia proper.....	3,354,585	3,370,238	3,250,898	3,120,240	3,047,481
Poland.....	88,580	93,761	87,486	90,567	88,331
Northern Caucasia.....	53,435	58,646	63,497	63,246	80,019
Trans-Caucasia.....	21,322	24,419	17,251	21,525	20,207
Siberia.....	<sup>1</sup> 103,498	107,642	117,359	128,792	143,224
Stepes.....	37,010	62,949	75,254	90,597	89,957
Uralsk.....	886	459	35	337	1,199
Turkestan.....	81,620	67,352	55,068	85,675	94,430
Total Russian Empire (92 Govern- ments, etc.).....	<sup>2</sup> 3,740,936	3,785,466	3,696,848	3,600,979	3,464,848

## PRODUCTION.

Divisions, Governments, Provinces, etc.	1906	1907	1908	1909	1910	Yield per acre in 1910.
European Russia proper:	<i>Bushels.<sup>3</sup></i>	<i>Bushels.<sup>3</sup></i>	<i>Bushels.<sup>3</sup></i>	<i>Bushels.<sup>3</sup></i>	<i>Bushels.<sup>3</sup></i>	<i>Bushels.<sup>3</sup></i>
Kovno.....	800,221	822,598	756,305	866,772	954,410	8.4
Courland.....	287,677	363,063	210,551	281,680	197,331	7.0
Livonia.....	1,131,298	1,380,154	1,221,773	1,230,221	1,012,061	5.1
Esthonia.....	87,380	94,474	69,195	92,926	79,190	8.2
Vitebsk.....	512,350	565,359	504,805	561,861	487,007	3.9
Pskof.....	1,159,350	1,181,274	831,755	705,812	766,043	3.4
St. Petersburg.....	131,618	202,812	143,355	151,480	150,706	4.9
Novgorod.....	343,265	346,167	323,145	409,800	362,805	5.7
Olonets.....	20,378	19,024	25,988	23,989	19,282	3.6
Tver.....	1,531,183	1,487,847	1,105,116	1,338,108	1,222,289	5.5
Vladimir.....	619,528	697,171	483,267	576,580	492,424	4.7
Yaroslaf.....	769,590	652,610	556,589	539,370	654,093	6.5
Kostroma.....	532,341	548,850	572,710	523,184	483,331	4.1
Vologda.....	413,620	371,704	378,088	415,749	433,676	5.7
Nizhni Novgorod.....	286,581	541,692	448,895	553,235	281,680	4.0
Vyatka.....	634,876	1,196,946	1,339,334	2,391,119	1,087,963	3.5
Orenburg.....	277,166	431,806	465,210	546,851	393,630	3.9
Perm.....	538,210	556,782	519,573	651,256	617,980	4.9
Vilna.....	309,561	322,694	294,642	311,344	338,493	6.9
Minsk.....	489,780	529,762	529,891	510,738	467,919	7.8
Moghilef.....	457,559	543,240	457,278	622,107	499,840	6.6
Smolensk.....	1,620,368	1,459,409	1,334,949	1,460,376	1,407,754	5.4
Other Governments.....	4,299,873	4,860,136	4,753,540	5,003,299	4,333,212	7.6
Total European Russia.....	17,254,373	19,175,574	17,325,954	19,766,857	16,743,119	5.5
Poland.....	911,139	925,068	902,820	1,011,932	816,020	9.2
Northern Caucasia.....	364,997	467,016	410,396	583,222	590,057	7.4
Trans-Caucasia.....	108,661	94,409	74,934	99,117	96,408	4.8
Siberia.....	<sup>1</sup> 614,691	634,167	841,944	770,621	877,348	6.1
Stepes.....	218,611	545,626	495,584	338,493	428,324	4.8
Uralsk.....	4,256	3,224	580	1,806	580	.5
Turkestan.....	498,357	559,490	595,926	625,461	627,331	6.6
Total Russian Empire (92 Govern- ments, etc.).....	<sup>2</sup> 19,975,085	22,404,574	20,648,138	23,197,509	20,179,187	5.7

<sup>1</sup> Not including eastern Siberia in 1906.<sup>2</sup> Not including eastern Siberia, Akmolinsk, and Ferghana in 1906.<sup>3</sup> Bushels of 56 pounds.

Approximately four-fifths, or about 16 million bushels, of the flaxseed annually produced in the Empire is either crushed in the Russian oil mills or returned to the soil as seed. The remainder is exported chiefly to the United Kingdom, Germany, and Holland, where it is used principally in the manufacture of linseed oil and oil cake, and to some extent for seeding purposes in the culture of flax for fiber. "Baltic" linseed oil, expressed from flaxseed imported from Russia, is the highest priced oil on the British markets.

*Exports of flaxseed from the Russian Empire, 1907-1911.*

Country of destination.	1907	1908	1909	1910	1911
	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>
Austria-Hungary.....	58,554	74,023	48,470	72,137	(2)
Belgium.....	385,445	424,648	424,387	481,783	
United Kingdom.....	1,462,581	2,495,869	1,475,437	2,049,508	
Germany.....	861,197	1,576,482	1,095,594	1,759,843	
Netherlands.....	243,272	1,076,879	442,614	999,039	
France.....	183,398	155,231	244,515	211,585	
Sweden.....	56,177	34,088	53,414	104,438	(2)
Other countries.....	138,952	213,344	97,890	104,017	
Total.....	3,389,576	6,050,564	3,882,341	5,782,650	<sup>3</sup> 6,319,740

<sup>1</sup> Bushels of 56 pounds.

<sup>2</sup> No detailed data available.

<sup>3</sup> Exports over European frontier only.

Definite official statistics of the separate quantities of flaxseed crushed annually in Russian oil mills and required for sowing purposes—the two sole channels of domestic consumption—are not extant. The heavy exports of linseed oilcake, however, point conclusively to an average annual crush of over 10 million bushels. During the five years, 1906-1910, the yearly exports of linseed oilcake were on an average 216,684 tons. On the authority of a prominent crusher operating on a large scale at Hull, England, "Baltic" flaxseed yields on an average only 27 per cent oil (or about 2 gallons per bushel) and 73 per cent cake. On this basis the quantity of flaxseed necessary to produce the 216,684 tons of oilcake, which represents the average annual export movement, would be 10,601,000 bushels. As Russian feeders make a very limited use of this valuable cattle food, a comparatively small addition to the quantity of seed just mentioned would constitute the total crush. The linseed oil produced, amounting at the least to over 21 million gallons annually, is almost wholly consumed in Russia; exports range between 100,000 and 200,000 gallons a year and imports are nil. Russian linseed oilcake, because of the high percentage of oil it contains, usually commands top prices, and the bulk of it is taken by four countries of northern Europe, which also import large quantities of linseed and other kinds of oilcake from other sources.

*Exports of linseed oilcake from Russia, by countries of destination, 1906-1910.*

Country.	1906	1907	1908	1909	1910
	<i>Tons.<sup>1</sup></i>	<i>Tons.<sup>1</sup></i>	<i>Tons.<sup>1</sup></i>	<i>Tons.<sup>1</sup></i>	<i>Tons.<sup>1</sup></i>
Belgium.....	19,109	13,628	30,033	30,911	34,770
United Kingdom.....	67,061	50,643	52,708	51,012	53,678
Germany.....	74,915	90,998	105,272	81,494	88,701
Netherlands.....	11,987	9,629	18,072	26,992	27,353
Denmark.....	10,500	11,625	12,165	13,457	9,236
France.....	22,423	11,337	4,641	7,592	14,954
Other countries.....	7,470	6,512	5,748	3,758	3,038
Total.....	213,465	194,372	228,639	215,216	231,730

<sup>1</sup> Ton=2,000 pounds.

In other flax-fiber producing countries of Europe the quantity of seed sown per acre varies, according to the predilections of individual farmers, between 5 and 8 pecks, whereas in countries which cultivate the plant solely for the seed the quantity sown per acre is probably little more than 2 pecks. In Russia both systems of cultivation are practiced, that which has fiber for its object, as has been shown, being much the more extensive. The Russian flax-fiber producer, however, sows somewhat less thickly than is the custom in other fiber-growing countries, and, although there are no official estimates of the quantities annually sown, it is known that requirements for this purpose in Russia are not so heavy as might be assumed from the acreage sown and seeding customs elsewhere.

## EGYPT.

The Egyptian Department of Agriculture, in a report dated August 4 relative to the 1912 cotton crop, states: The prospects are extremely good. The second brood of the cotton worm in most cases did not appear, owing to the careful work which had been done in the early picking of the egg masses, and the occurrence of a disease which destroyed the worms in most of the localities where they hatched out.

The September 3 report of the above-named Department continues, viz: "Cotton worm has now disappeared from the cotton areas. Only slight attacks were reported since the beginning of August. Bollworm is general, but not severe, in both Upper and Lower Egypt." In a system of notation where 100 indicates a condition of the plants at the time of the report which promises a probable yield per acre equal to the average of the last 10 years, the condition of the crops in Lower Egypt in early September was rated 109 and in Upper Egypt 113.

According to the figures just issued by the Department of Direct Taxes, the area under cotton this year amounts to 1,397,393 acres in Lower Egypt and 389,833 in Upper Egypt, or 10,940 in excess of that of 1911.



# SUPPLEMENTAL.

## RUSSIAN CEREAL CROPS IN 1912.

The Central Statistical Committee's estimate of the total areas sown to various crops for the 1912 harvest in 63 governments of European and 10 of Asiatic Russia, and of the probable yields therefrom, as suggested by the appearance of the plants when in bloom, was published in the September 1 issue of the semiofficial journal "Torgovo Promishlenna Gazeta (St. Petersburg)." The original figures reduced to units of American denomination are shown below with comparisons for previous years; preliminary estimates of yields are given for both 1912 and 1911, and the final estimates for 1911, 1910, 1909, and 1908.

*Area (sown) and probable production of cereals in 1912 and 1911, as suggested by the appearance of the plants in early July, in 73 governments of the Russian Empire, and final yields in 1911 and previous years.*

### AREA.

Crop.	1912	1911	1910	1909	1908
Wheat:	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Winter.....	17,221,386	16,745,699	15,817,459	15,205,356	13,539,279
Spring.....	54,078,771	57,088,636	55,248,537	50,209,342	48,147,962
Total wheat.....	71,300,157	73,834,635	71,065,996	65,414,698	61,687,241
Rye:					
Winter.....	71,657,327	71,900,570	69,659,760	70,556,606	69,576,304
Spring.....	1,275,608	1,350,390	1,392,535	1,426,659	1,523,203
Total rye.....	72,932,935	73,250,960	71,052,295	71,983,265	71,099,513
Barley.....	28,873,292	28,968,321	28,437,455	26,888,108	26,540,510
Oats.....	45,784,752	47,582,212	47,331,451	46,268,854	45,727,473
Corn.....	4,085,996	3,970,449	3,651,342	3,802,997	3,645,254
Potatoes.....	11,293,925	11,254,509	11,126,643	10,772,589	10,520,699

### PRODUCTION (PRELIMINARY AND FINAL).

Crop.	1912 (preliminary).	1911 (preliminary).	1911 (final).	1910 (final).	1909 (final).	1908 (final).
Wheat:	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Winter.....	244,000,000	195,000,000	189,291,000	248,722,000	206,832,000	143,903,000
Spring.....	505,000,000	434,000,000	320,200,000	526,972,000	576,438,000	421,589,000
Total.....	749,000,000	629,000,000	509,491,000	775,694,000	783,270,000	565,492,000
Rye:						
Winter.....	971,000,000	793,000,000	751,340,000	854,010,000	884,585,000	768,902,000
Spring.....	13,000,000	11,000,000	10,769,000	13,618,000	12,248,000	13,891,000
Total.....	984,000,000	804,000,000	762,109,000	867,628,000	896,833,000	782,793,000
Barley.....	458,000,000	436,000,000	411,235,000	458,992,000	473,618,000	377,919,000
Oats.....	1,032,000,000	921,000,000	858,356,000	1,045,991,000	1,145,387,000	942,587,000
Corn.....	62,000,000	61,000,000	82,286,000	77,181,000	39,593,000	61,354,000
Millet.....	88,000,000	73,000,000	68,034,000	103,823,000	107,082,000	(1)
Buckwheat.....	46,000,000	41,000,000	49,580,000	56,342,000	51,844,000	(1)

Bushels: Wheat, 60 pounds; rye, corn, and millet, 56 pounds; barley and buckwheat, 48 pounds; and oats, 32 pounds.

<sup>1</sup> No data available.

CROP AREAS AND LIVE STOCK IN ENGLAND AND WALES AND IRELAND,  
1912.

According to the preliminary estimates of the British Board of Agriculture and Fisheries, and of the Irish Department of Agriculture and Technical Instruction, respectively, the areas under various crops in England and Wales and in Ireland in 1912 and 1911, and the number of live stock in 1912-1910, were as follows:

*Crop areas in England and Wales, and Ireland, 1912 and 1911.*

Crop.	England and Wales.		Ireland.		Total England, Wales, and Ireland.	
	1912	1911	1912	1911	1912	1911
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Wheat.....	1,863,356	1,842,532	44,845	45,056	1,908,201	1,887,588
Rye.....	54,188	40,328	7,765	9,026	61,953	49,354
Barley.....	1,456,518	1,424,313	165,386	158,180	1,621,884	1,582,493
Oats.....	2,072,394	2,047,173	1,045,921	1,040,185	3,118,315	3,087,358
Buckwheat.....	4,990	5,654			4,990	5,654
Potatoes.....	463,007	429,172	595,218	591,259	1,058,225	1,020,431
Turnips.....	1,172,857	1,124,572	271,761	270,805	1,344,618	1,395,377
Mangold.....	485,645	450,070	181,690	177,857	567,335	527,927
Beans.....	277,017	301,454	1,421	1,683	278,438	303,137
Peas.....	201,144	166,894	279	301	201,423	167,195
Parsnips.....			651	696	651	696
Carrots.....	11,700	10,714	1,332	1,444	13,032	12,158
Onions.....	4,777	4,030			4,777	4,030
Cabbage.....	61,414	58,877	37,980	37,281	99,394	96,158
Kohl-rabi.....	20,352	13,278			20,352	13,278
Rape.....	79,375	72,744	3,109	2,941	82,484	75,685
Vetches.....	129,808	102,736	2,008	2,317	131,816	105,053
Alfalfa.....	56,374	53,123			56,374	53,123
Flax.....	830	446	54,917	66,618	55,747	67,064
Hops.....	34,831	33,056			34,831	33,056
Fruit.....	77,979	77,189	15,327	14,045	93,306	91,234
Other crops.....			28,379	29,127	28,379	29,127
Clover and rotation grasses.....	2,522,965	2,608,777			2,522,965	2,608,777
Total.....	10,951,521	10,867,132	2,357,969	2,348,821	13,309,490	13,215,953

<sup>1</sup> Includes beet root.

*Number of live stock and poultry in England and Wales, and Ireland, 1912, 1911, and 1910*

## LIVE STOCK.

Kind.	England and Wales.			Ireland.		
	1912	1911	1910	1912	1911	1910
Horses.....	<i>Number.</i> 1,406,099	<i>Number.</i> 1,284,003	<i>Number.</i> 1,341,809	<i>Number.</i> 617,532	<i>Number.</i> 616,331	<i>Number.</i> 613,244
Cattle.....	5,841,908	5,914,247	5,866,568	4,848,498	4,711,720	4,688,888
Sheep.....	18,053,584	19,330,650	19,958,299	3,828,829	3,907,436	3,979,516
Swine.....	2,496,358	2,651,039	2,216,599	1,323,957	1,415,119	1,200,005

## POULTRY.

Ducks.....	}	(1)	(1)	}	3,343,610	3,441,050	3,367,578
Geese.....					1,825,293	1,818,302	1,780,380
Turkeys.....					1,211,074	1,139,485	1,060,742
Fowl.....					19,145,747	19,048,964	18,130,315

<sup>1</sup> The latest statistics respecting the number of poultry in Great Britain are those of the Census of Production, which gave the number on farms in 1908, viz: Ducks, 2,963,000; geese, 712,000; turkeys, 697,000; and fowl, 32,356,000.



## COTTON AREA OF BRITISH INDIA, 1912-13.

The First General Memorandum of the Commercial Intelligence Department, dated August 15, 1912, states:

The Provinces dealt with in this memorandum comprise on the average of the five years ending 1910-11 a total of 15,948,000 acres under cotton. This represents about 74 per cent of the entire reported cotton area of India. The memorandum relates, however, mainly to the early crop and records acreage only.

No attempt is made at this season to estimate the probable outturn. The present condition of the crop is reported to be from fair to good, though damage from the present continuous rain is anticipated in places.

*Estimate of the area under cotton in August.*

Provinces and States.	1912-13	1911-12	1910-11
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Bombay (Deccan) <sup>1</sup> .....	1,357,000	1,467,000	1,545,000
Central Provinces and Berar.....	4,222,000	4,135,000	4,491,000
Madras.....	60,000	136,000	136,000
Punjab <sup>1</sup> .....	1,228,000	1,322,000	1,285,000
United Provinces.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Burma.....	192,000	179,000	168,000
Bengal.....	50,000	63,000	
Bihar and Orissa.....	80,000	85,000	161,000
Assam.....	35,000	36,000	
Northwest frontier.....	48,000	45,000	31,000
Ajmer-Merwara.....	14,000	18,000	24,000
Hyderabad.....	2,213,000	2,509,000	2,833,000
Central India.....	<sup>3</sup> 675,000	<sup>3</sup> 747,000	1,285,000
Rajputana.....	<sup>4</sup> 236,000	<sup>4</sup> 230,000	384,000
Mysore.....	11,000	6,000	12,000
Total.....	10,421,000	10,978,000	12,355,000

<sup>1</sup> Including native States.

<sup>2</sup> Figures not reported.

<sup>3</sup> Excluding Gwalior and Baghelkhand States. (Report just received for Baghelkhand shows 28,000 acres sown.)

<sup>4</sup> Excluding Mewar and Bundi States.

## CORN AND POTATOES IN HUNGARY IN 1912.

On August 19 was issued the first official estimate this season of the area under corn and potatoes, and of the probable yield, as indicated by appearances at that date. The figures follow:

*Area and production of corn and potatoes in Hungary proper 1910-12, as estimated August 19.*

Year.	Corn.		Potatoes.	
	<i>Acres.</i>	<i>Bushels.</i>	<i>Acres.</i>	<i>Bushels.</i>
1912 (preliminary).....	6,123,770	201,000,362	1,534,401	197,605,110
1911 (final).....	6,089,864	137,420,800	1,534,041	163,037,915
1910 (final).....	5,997,700	187,732,748	1,507,693	176,973,942

The official estimate of September 9 reduces the August estimate on corn to 191,367,000 bushels and that on potatoes to 192,057,000 bushels.

## REVISED ESTIMATE OF 1912 CROPS OF ITALY.

The Italian department of agriculture, industry, and commerce has recently issued a revision of its preliminary estimate of crop yields in 1912. The figures compared with final estimates for previous years are subjoined:

*Area and production of specified crops in Italy, 1912-1910.*

Crop.	Area.			Production.		
	1912. <sup>1</sup>	1911.	1910.	1912. <sup>1</sup>	1911.	1910.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>	<i>Bushels.<sup>2</sup></i>
Wheat.....	11,737,250	11,741,204	11,758,501	165,521,000	192,395,442	153,403,417
Rye.....	301,462	302,179	300,795	5,409,000	5,297,339	5,438,669
Barley.....	605,395	611,820	611,721	8,624,000	10,882,457	9,482,536
Oats.....	1,235,500	1,270,489	1,243,654	28,244,000	40,973,179	28,574,372
Corn.....	4,065,783	4,066,376	4,005,046	91,727,000	93,679,753	101,721,819
				<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Rice.....	357,100	358,000	355,500	1,080,254,000	1,042,798,000	965,571,000

<sup>1</sup> Preliminary.<sup>2</sup> Bushels of weight.

## CROPS OF CHILE.

Up to 1910-11 crop reporting in Chile was a function of the Bureau of Agricultural Statistics and Intelligence, Department of Industry and Public Works; but by a law enacted December 5, 1911, the work of making and publishing crop estimates was transferred to the newly established Central Statistical Bureau of the Republic. Below is given the recently published estimate of the Central Statistical Bureau on the area and production of crops harvested in the winter and spring of 1910-11, compared with the estimates of the Department of Industry and Public Works, relative to the crops of the preceding years. The figures relating to cereal and pulse crops, it may be noted, are officially stated to be short of the country's actual production.

*Area and production of specified crops in Chile, 1910-11 to 1907-8.*

[From Estadística Agrícola, Chile.]

Crop.	Area sown.				Production.			
	1910-11	1909-10	1908-9	1907-8	1910-11	1909-10	1908-9	1907-8
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>	<i>Bushels.<sup>1</sup></i>
Wheat.....	967,775	839,737	1,100,606	1,137,688	18,183,805	19,681,783	17,671,471	18,914,549
Rye.....	2,772	2,619	5,953	5,100	44,663	65,831	76,311	56,241
Barley.....	84,738	84,170	128,465	137,328	3,378,646	3,656,706	3,937,567	3,750,594
Oats.....	58,219	47,325	70,137	89,660	1,860,510	2,611,052	2,372,591	1,816,845
Corn.....	45,765	51,777	61,978	63,075	1,221,218	1,377,836	1,177,874	1,343,664
Potatoes.....	67,940	53,435	74,827	77,095	7,439,808	7,861,842	6,403,996	8,063,009
					<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>
Kidney beans....	72,225	68,763	80,913	83,809	40,814	37,159	35,202	40,281
Vetches.....	20,789	22,466	35,298	44,873	8,252	12,043	12,166	18,302
Lentils.....	1,334	1,100	4,342	5,036	426	525	1,775	2,049
Chickpeas.....	4,406	5,446	7,658	6,274	900	1,330	1,798	1,788
Flax:								
Seed.....	264	2,145	12,661	756	80	1,290	2,552	90
Fiber.....		79	( <sup>2</sup> )	( <sup>2</sup> )	3	3	17	( <sup>2</sup> )
Hemp (fiber)....	151	880	1,379	620	104	765	629	663
Tobacco.....	64	1,100	1,421	6,175	75	1,216	1,492	4,423
Stone fruits....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	877	676	432	526
Figs.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,266	1,173	1,309	1,124
Olives.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	477	222	424	220
Cherries.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	59	( <sup>2</sup> )	( <sup>3</sup> )	( <sup>2</sup> )
Plums.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	144	249	4100	( <sup>2</sup> )
Raisins.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	758	730	533	529
Walnuts.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2,170	2,031	1,737	2,234
Vines.....	129,473	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
					<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
Wine.....					26,169,835	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Brandy.....					381,720	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
					<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>	<i>Tons (2,000 pounds).</i>
Alfalfa:								
Hay.....	( <sup>2</sup> )	( <sup>2</sup> )	43,539	15,721	258,663	213,737	111,737	136,072
Seed.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5,122	628	355	736	350
Clover:								
Hay.....	( <sup>2</sup> )	( <sup>2</sup> )	7,831	1,169	12,112	12,046	9,729	4,421
Seed.....	959	3,430	( <sup>2</sup> )	12,041	195	731	589	1,693

<sup>1</sup> Bushels: Wheat and potatoes 60, rye and corn 56, barley 48, and oats 32 pounds.<sup>2</sup> No data.<sup>3</sup> Included with plums.<sup>4</sup> Including cherries.

Respecting the crops of 1912-13, the United States consul at Valparaiso under date of August 14 reports prospects excellent. Seedings have been heavy, and rainfall in the central part of the country has exceeded that of any year since 1905.

The number of live stock in Chile in 1911 and 1910 is officially estimated as follows:

*Number of live stock in Chile, 1911 and 1910.*

Live stock.	1911	1910	Live stock.	1911	1910
	<i>Number.</i>	<i>Number.</i>		<i>Number.</i>	<i>Number.</i>
Horses.....	352,108	347,129	Sheep.....	3,537,738	3,636,053
Asses.....	32,642	26,514	Goats.....	210,143	205,080
Mules.....	30,335	29,728	Swine.....	160,050	177,687
Cattle.....	1,640,322	1,635,140			

THE 1912 WHEAT YIELD IN 11 PRINCIPAL PRODUCING COUNTRIES.

The preliminary official estimates of 11 countries on their respective yields of wheat in 1912 indicate an aggregate output of about 267 million bushels in excess of the crops of the same countries in 1911 and 206 million bushels larger than in 1910. The estimates, by countries, are given below with comparisons, the Argentine and Australian crops being those harvested in the winter of 1911-12, 1910-11, etc.:

*Production of wheat in countries named, 1912-1908.*

Country.	1912 (preliminary).	1911 (final).	1910 (final).	1909 (final).	1908 (final).
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Russia.....	749,000,000	509,491,000	775,694,000	783,270,000	565,492,000
United States.....	1,690,000,000	621,338,000	635,121,000	683,350,000	664,602,000
British India.....	366,370,000	374,845,000	359,654,000	285,189,000	228,670,000
France.....	334,871,000	315,444,000	257,667,000	356,193,000	317,765,000
Canada.....	206,029,000	215,851,000	149,990,000	166,744,000	112,434,000
Argentina.....	169,424,000	145,981,000	131,010,000	156,162,000	192,487,000
Hungary.....	171,408,000	174,888,000	169,700,000	113,352,000	152,204,000
Italy.....	165,521,000	192,395,000	153,168,000	189,959,000	152,236,000
Spain.....	112,416,000	148,495,000	137,448,000	144,105,000	119,970,000
Prussia.....	90,470,000	95,741,000	91,233,000	83,216,000	86,313,000
Australia.....	74,195,000	98,109,000	93,203,000	64,564,000	46,063,000
Total 11 countries	3,159,704,000	2,892,578,000	2,953,948,000	3,026,104,000	2,638,236,000
Total all countries <sup>2</sup> .....		3,516,862,000	3,572,084,000	3,584,702,000	3,181,547,000

<sup>1</sup> Comprises preliminary estimate of winter and the promise for spring wheat as interpreted from condition reports Sept. 1.

<sup>2</sup> All countries for which statistics are available.

Approved:

W. M. HAYS,

*Acting Secretary of Agriculture.*

WASHINGTON, D. C., September 28, 1912.